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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BROWN, RUEBEN M	

ART UNIT	PAPER NUMBER
2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/253,117

Applicant(s)

KIRALY, JOZSEF

Examiner

Reuben M. Brown

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The independent claims have been amended to include "receiving, at a transmission scheduler, a request from a first user device", "a second user device" and a "third user device". The claimed subject matter still reads on Ice, since the reference supports transmitting requests for information from a subscriber terminal, to a server, Abstract; col. 3, lines 1-15. As for the, "transmission scheduler is separate from the server", the claimed feature corresponds with the combination of Ice and Grau.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ice, (U.S. Pat # 5,884,031), in view of Grau, (U.S. Pat # 5,818,906) and Ishida, (U.S. Pat # 6,122,259).

Considering amended claims 1, 8, 15, 24 & 35, Ice discloses an information transfer systems and methods for broadcasting files to a plurality of receiving destinations comprising the steps of: causing a transmitting communication Server A to transmit a first stream of data representing digital broadcast information to relaying client system C 1 & C2, wherein server A and clients C1 & C2 may be coupled to the Internet, (Abstract; col. 1, lines 25-45; col. 2, lines 1550). Ice furthermore causes client devices C 1 & C2, to relay broadcast information the next level of client systems; such as C3-C6 see Fig. 1 & col. 3, lines 11-28.

Regarding the amended claimed feature of, “receiving, at a transmission scheduler, a request from a first user device”, “a second user device” and a “third user device”. Ice supports transmitting requests for information from a subscriber terminal, to a server, Abstract; col. 3, lines 1-15.

As for the further claimed feature of transmission of broadcast information, Ice is directed to computer files, which is not necessarily the same as ‘digital broadcast information’. Nevertheless, Grau teaches broadcast of requested digital programming, col. 4, lines 20-22. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Ice with the feature of digital broadcast, at least for the desirable advantage providing the user with a wider range of content, as taught by Grau.

With respect to the amended claimed feature of receiving and rendering the broadcast information in a first user device as well as the second or third user device to which the first user device transmits or relays the instant broadcast information, this feature reads on the operation of Ice, col. 3, lines 62-67. However, Ice does not explicitly teach the additionally claimed feature of ‘receiving and rendering, *concurrently* the broadcast information on the first, second and third user devices’, emphasis added.

Nevertheless, Ishida discloses a system wherein video information is simultaneously multicast to all of the user data terminals in the system. It is specifically taught that each of the multipoint conference devices receives multicast data such as audio & video, and displays the data on the monitor, while relaying it to the subsequent terminal, col. 4, lines 21-27, which reads on the claimed feature. One of ordinary skill in the art at the time the invention was made would have been motivated to construct a system with as little delay as possible, thereby enable concurrent reception and display of information among all of the participating clients, since in fact all of the clients are receiving the same information. If the clients at the end of the relay (intermediate or last levels) receive their information with a significant delay, such an arrangement would represent an undesirable quality of service value for the instant clients, especially for live or real-time events.

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Ice with the teachings of Ishida providing concurrent reception and display

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of audio/video data to all the terminals in a network using a relay algorithm, at least for the desirable advantage of supporting real-time communication or events, which is the purpose of Ishida.

As for the additionally amended claimed feature, 'wherein the user devices form one or more communication chains such that each chain has one more tiers' is met by Ice, (Fig. 1). The claims additionally recite that 'the sum of user devices in corresponding tiers of the communication chains is variable', instead of pre-determined. Examiner points out that Ice discloses an embodiment with pre-determined *maximum* number of clients directly connected to the server A, and a pre-determined *maximum* of clients downwardly connected to each relaying client; see col. 1, lines 35-45; col. 2, lines 18-28 & col. 3, lines 64-67. However, the actual number clients downwardly connected to each relaying client is still variable, *up to the maximum*.

Thus Ice meets the amended claimed subject matter, since each particular client has a variable number of clients downwardly connected, i.e. between 0 and 4. Therefore the sum of user devices in the corresponding tiers of Ice is variable and not pre-determined. Moreover, Ice clearly teaches that the pre-determined rules of the network may be changed in order to vary the structure of the network, col. 4, lines 18-27.

Regarding the newly claimed technique of 'each user device sending its update status to a transmission scheduler, which monitors the update messages and initiates changes among the

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server and user devices', Ice does not explicitly teach such a feature. Nevertheless, Grau teaches a method of monitoring the performance of a network, and making adjustments to the network in order to optimize the instant network, Abstract; col. 2, lines 45-67 thru col. 3, lines 1-15; col. 9, lines 1-65 thru col. 10, lines 1-65. Grau specifically discusses detecting failures in the system by taking periodic status updates and as a result initiates a network re-configuration, (which reads on 'initiates changes...'). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Ice with the technique of managing a network by using failure based and performance-based changes to the network, at least for the well known desirable advantage of optimizing the performance of the network, as taught by Grau, see col. 1, lines 5-35 & col. 2, lines 45-67.

The claimed 'transmission scheduler that this separate from the server' reads on the cable control unit, CCU 2 of Grau, whereas the server corresponds with the combiner 108, see Fig. 1.

Regarding claim 8, in Ice the first group of user devices reads on C 1 & C2, the second group of user devices reads on C3-C6 (Fig. 1).

Regarding claim 35, the instant claim includes the limitation that the server is configured by a transmission scheduler to communicate the digital streams to the first & second devices and that the scheduler maintains communication links between the server and first, second & third user devices. Accordingly, examiner points out that Ice discloses that when the Server A receives a request from a client not in first level of clients, such as C3, the server A sends the instant

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client an instruction to connect to a particular client such as client C 1. Moreover C 1 is instructed to transmit information to particular additional clients.

Considering claims 2-4, 16-19, 27-30 & 37-40, Ice teaches a system and a method of transferring, communicating and broadcasting "files", but does not disclose the specific types or content of the files. Nevertheless, at the time the invention was made, transferring and broadcasting radio, audio, visual television and computer program files over a communications network was very well known in the art. Ishida teaches the multicasting of audio & video data, col. 3, lines 35-40 & col. 4, lines 21-23. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ice to broadcast radio, audio, visual, television and computer files so that a user may access audio/video and program data in order to have a fully interactive entertainment system.

Considering claims 5, 11, 20, 31 & 41, Ice reveals client relaying communication devices C 1 & C2, wherein the systems are capable of receiving files and further relaying and communicating broadcast files to a plurality of other users (Fig. 1). Ice furthermore teaches that for instance client device C3, will receive broadcast information from C2, in the event that its original provider, C1, becomes inactive, see col. 2, lines 18-21, which reads on the claimed subject matter.

Considering claims 6-7, 21-23, 32-34 & 42-44, Ice teaches that client device C2, which is comparable to device C 1, relays the broadcast information to further clients devices, in the same manner as C 1.

Considering claim 9, Ice teaches direct communication links between the first group of electronic devices and the second group of electronic devices (claims 1 and 2).

Considering claim 10, Ice teaches that the server A includes a database 22 holding a list of all clients presently connected to the network, col. 2, lines 45-55. This disclosure suggests that the system tracks in real-time the connection status of clients, thereby reading on periodically updating the status of the devices.

Considering claim 12, Ice teaches terminating direct communications links with terminals that disconnect from the server, i.e. become inactive, see col. 3, lines 44-50.

Considering claim 13, Ice discloses a first and second set of electronic devices each comprising a computer system configured for receiving and relaying broadcast information (Fig. 1).

Considering claim 14, Ice is directed to operating over the Internet.

Considering claims 25-26 & 36, in Ice each user device that seeks to receive information connects with server A over the Internet. Server A then instructs particular clients to connect with the other specific clients and subsequently relay information. Ice also discloses maintaining a log of clients on the system, see col. 2, lines 45-54.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7290 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown


REUBEN M. BROWN
PATENT EXAMINER